

I CLAIM:

1. A method of processing roasted coffee to improve the retention of carbon dioxide and aromatics liberated from the roasted coffee, the method comprising the steps of:

- 5 (i) preparing one or more containers for receiving coffee therein;
- (ii) purging said containers of contained air through flushing said containers with an inert gas;
- (iii) transporting and delivering roasted coffee to a grinding circuit;
- (iv) grinding said roasted coffee directly into a container filling apparatus;
- 10 (v) with said container filling apparatus, delivering said ground coffee directly into said purged containers; and,
- (vi) sealing said containers to maximize the retention of carbon dioxide and aromatics liberated from said roasted coffee and to minimize contact of said ground roasted coffee with the air.

15

2. The method as claimed in claim 1 wherein said steps are completed with minimal delay between successive steps to minimize the loss of carbon dioxide gas liberated from said coffee prior to the sealing of said coffee within said containers.

20

3. The method as claimed in claim 1 including the further step of maintaining said purged containers in a generally upright position with said inert gas retained therein to thereby prevent the influx of air into said purged containers.
- 5 4. The method as claimed in claim 3 wherein said inert gas is nitrogen.
5. The method as claimed in claim 1 wherein said step of grinding said roasted coffee directly into a container filling apparatus is carried out within a sealed enclosure having substantially all of the oxygen therein removed.
- 10 6. The method as claimed in claim 1 wherein said step of grinding said roasted coffee directly into a container filling apparatus is carried out within a modified oxygen depleted atmosphere.
- 15 7. The method as claimed in claim 3 wherein said step of transporting and delivering roasted coffee to a grinding circuit comprises the transportation of said coffee directly from a roasting circuit with minimal delay and minimal degasification.
- 20 8. The method as claimed in claim 7 wherein said roasted coffee is transported to said grinding circuit in an oxygen depleted atmosphere.

9. The method as claimed in claim 8 wherein said containers are formed from a gas impermeable material, said step of preparing one or more containers for receiving coffee therein including the incorporation of a pressure-sensitive one-way valve within said containers, said one-way valve permitting internal gas pressure exceeding a pre-determined value to be bled off from the interior of said containers while preventing the influx of air into said containers when said containers are sealed with roasted coffee retained therein.

10. The method as claimed in claim 9 wherein said steps of grinding said roasted coffee directly into a container filling apparatus, delivering said ground coffee to said purged containers, and sealing said containers are completed within a total time frame of less than five minutes to minimize the loss of carbon dioxide and aromatics liberated from said roasted coffee.

11. The method as claimed in claim 10 wherein said coffee is ground to a size range of between approximately .01 and .1 inches.

12. The method as claimed in claim 11 wherein said coffee is quenched and cooled to a temperature of between approximately 80 and 150 degrees Fahrenheit prior to leaving said roasting circuit.

13. A method of processing roasted coffee beans to minimize the loss of carbon dioxide and aromatics liberated from the coffee beans following roasting, the method comprising the steps of preparing one or more containers for receiving roasted coffee beans therein, purging said containers of contained air through flushing with an inert gas and thereafter maintaining said purged containers in a generally upright position with said inert gas retained therein to prevent the influx of air into said purged containers, without delay and without allowing said roasted coffee beans to accumulate in storage bins or staging areas transporting and delivering said roasted coffee beans directly to a container filling apparatus, with said container filling apparatus delivering said roasted coffee beans directly into said purged containers, and, thereafter, sealing said containers to maximize the retention of carbon dioxide and aromatics liberated from said roasted coffee beans and to minimize contact of said roasted coffee beans with the air.

14. The method as claimed in claim 13 wherein said step of delivering said roasted coffee beans directly into said containers is carried out within a sealed enclosure having substantially all of the oxygen therein removed.

15. The method as claimed in claim 13 wherein said step of delivering said roasted coffee beans directly into said containers is carried out within a modified oxygen depleted atmosphere.

16. The method as claimed in claim 13 wherein said step of transporting roasted coffee beans to said container filling apparatus comprises transportation of said roasted coffee beans directly from a roasting circuit with minimal delay and minimal degasification, said coffee beans transported in an oxygen depleted environment.

17. The method as claimed in claim 16 wherein said coffee beans are quenched and cooled to a temperature of between approximately 80 and 150 degrees Fahrenheit prior to leaving said roasting circuit.

18. A method of processing roasted coffee to minimize the loss of carbon dioxide gas and aromatics liberated from the coffee, the method comprising the steps of preparing one or more containers for receiving roasted coffee therein and maintaining said purged containers in a generally upright position, transporting and delivering roasted coffee to a grinding circuit located within an enclosure having an oxygen depleted atmosphere, grinding said coffee directly into a container filling apparatus, with said container filling apparatus delivering said ground coffee directly into said purged containers, sealing said containers to maximize the retention of carbon dioxide and aromatics liberated from said roasted coffee and to minimize the contact of said roasted coffee with the air,

said steps of said method completed with minimal delay between successive steps to minimize the loss of carbon dioxide gas liberated from said coffee prior to the sealing of said coffee within said containers.

5 19. The method as claimed in claim 18 including the further step of purging said containers of contained air through flushing with an inert gas.

10 20. The method as claimed in claim 18 wherein contained air is displaced from within said containers by carbon dioxide liberated from said ground roasted coffee delivered to said containers.